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10/591,301	09/01/2006	Goran Sundholm	U 016469-2	9248
140 7590 11/27/2999 LADAS & PARRY LLP 26 WEST 61ST STREET			EXAMINER	
			HARP, WILLIAM RAY	
NEW YORK,	NY 10023		ART UNIT	PAPER NUMBER
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

nyuspatactions@ladas.com

# Application No. Applicant(s) 10/591,301 SUNDHOLM, GORAN Office Action Summary Examiner Art Unit William R. Harp 3651 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 02 November 2009. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-28 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information-Displaceure-Statement(e) (FTO/SS/08)

Attachment(s)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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#### DETAILED ACTION

### Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2009 has been entered.

### Response to Amendment

- Examiner acknowledges the amendment to the claims entered November 2, 2009 in response to a Non-final Office Action mailed May 1, 2009.
- 3. Claims 1-28 are pending. Claim(s) 1, 3, 12, 13, 14, 16, 18 is/are currently amended.

### Response to Arguments

- 4. Applicant's arguments, see Pages 3 and 4, filed November 2, 2009, with respect to the rejection(s) of claim(s) 1, 14, 23, and 24 under 35 U.S.C. 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly cited prior art. The rejections appear below.
- While Tolman teaches the structural limitations of the applicant's invention, the examiner is persuaded by the applicant's argument that steam is not a liquid mist.

### Claim Objections

 Claims 5-13 should be dependent upon claim 4. The limitation "second medium" has insufficient antecedent basis in claim 1. Application/Control Number: 10/591,301 Page 3

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7. Claim 19 recites the limitation "means for bringing" in Line 1. There is insufficient antecedent basis for this limitation in the claim. The claim should be dependent upon claim 18 and recite a "means for feeding".

- 8. Claim 20 recites the limitation "means for bringing" in Line 1. There is insufficient antecedent basis for this limitation in the claim. The claim should be dependent upon claim 18 and recite a "means for feeding".
- Claim 22 recites the limitation "separator member" in Line 2. There is insufficient
  antecedent basis for this limitation in the claim.

# Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

# Claim Rejections - 35 USC § 112

- 11. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 12. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 13. Since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

- 14. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 15. Since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 23 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

## Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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 Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Matchette et al. (USPN 870981).

- 18. Regarding Claims 1, 14, and 16, Matchette et al. teaches a conveying pipe (a), a separator device (g), an ejector (s), the suction side of which is connected to the separator device (through suction pipe (q)), wherein the ejector comprises at least one nozzle (as illustrated). The actuating medium for the ejector is a liquid mist [P1, L89 source of fluid pressure]. There is further a means for feeding the liquid to the nozzle (v). The apparatus would perform the claimed method in its normal and expected operation.
- 19. Regarding Claims 17, 21, 23, and 24, there is an ejector nozzle (as illustrated), an ejector pipe (6), and a separator member (5), which is also considered a means for separating liquid and/or solid matter from gas flow.
- Claims 1, 2, 4, 5, 8, 9, 11, 12, 13, 14-19, 21, and 23-28 are rejected under 35
   U.S.C. 102(b) as being anticipated by Tuovinen et al. (USPN 4469493).
- 21. Regarding Claims 1, 14, and 16, Tuovinen et al. teaches conveying pipe (1), a separator device (9), an ejector (venturi 3), the suction side of which is connected to the separator device (as illustrated). The connection between the ejector and the separator device is considered a suction pipe. The actuating medium is an aqueous liquid mist [C3, L47-50, "scrubbing liquid"] fed into the actuator by a nozzle (12). The apparatus would perform the claimed method in its normal and expected operation.
- Regarding Claims 2 and 15, there is a collection means (7) and the liquid is re-sprayed (through nozzle 11).

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23. Regarding Claims 4, 5, 8, 9, 13, 18, 19, 26, and 27, a second medium (water, which is an liquid medium and aqueous) is fed to the ejector (through water nozzles 13). The second medium is brought along with the actuating medium. The nozzles (13) are located before the nozzle (12).

- Regarding Claim 11, the second medium is separated in the collecting means (7).
- 25. Regarding Claim 12, the second medium cleans the inside of the ejector [C3, L25], which the examiner considers to be eliminating particle nuisances.
- 26. Regarding Claims 17, 21, 23, and 24, there is an ejector nozzle (12) and an ejector pipe
- (pipe leading to collecting means (7), which the examiner further considers to be a separator member).
- 28. Regarding Claim 28, the scrubbing liquid is an aqueous mist.

## Claim Rejections - 35 USC § 103

- 29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 30. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - . 105(a) are bananarized as follows.
  - Determining the scope and contents of the prior art.
  - Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - Considering objective evidence present in the application indicating obviousness or nonobviousness.

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 Claims 1, 14, 16, 17, 21, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman (USPN 1965866) in view of Talmor (USPN 4828768).

- 32. Regarding Claim 1, Tolman teaches a method for conveying material by means of a pressure difference in a conveying pipe (18), in which method the material is fed to a conveying pipe (through aperture 20), and further in the conveying pipe to a separator device (10, 17) in which the transferred material is separated from conveying air, in which method underpressure is achieved to the conveying pipe with an ejector apparatus (46) the suction side of which is combined with the separator device (Figure 4), which ejector apparatus is operated with an actuating medium (steam P2, L123-133). Tolman fails to teach using a liquid mist as the actuating medium of the ejector apparatus. Talmor teaches using liquid mist as an actuating medium in an ejector (10), since liquid is fed to a nozzle (20) by a liquid supply conduit (16). It would have been obvious to use liquid as an actuating medium as is known in the art.
- 33. Regarding Claim 14, Tolman teaches an apparatus (Figure 4) for conveying material, by means of a pressure difference in a conveying pipe (18), which apparatus comprises a conveying pipe for the material, a separator device (17), and a means for achieving underpressure to the conveying pipe with an ejector apparatus (46) the suction side of which is connected to the separator device, which ejector apparatus is operated with an actuating medium (steam, P2, L123-133), wherein the ejector apparatus comprises at least one nozzle (illustrated in Figure 4 inside ejector 46) and a means for feeding (52, 53). Tolman fails to teach using a liquid mist as the actuating medium of the ejector apparatus. Talmor teaches using liquid mist as an actuating medium in an ejector (10), since liquid is fed to a nozzle (20) by a liquid supply conduit (16). It would have been obvious to use liquid as an actuating medium as is known in the art..

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- 34. Regarding Claim 16, the nozzle is arranged to the suction pipe (16).
- Regarding Claim 17, Tolman teaches a least one ejector nozzle (46), an ejector pipe (16),
   and a separator member (10).
- Regarding Claim 21, Tolman teaches a means for separating liquidous and/or solid matter from the gas flow (10, 17).
- Regarding Claim 23 and 24, the ejector apparatus (46) is directed at the separator member (10).
- 38. Regarding Claims 25 and 28, the liquid mist of Talmor is aqueous liquid mist.
- Claims 2 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman in view of Talmor as applied to claim 1 above, and further in view of British Document (GB 288862, hereafter GB '862).
- 40. Regarding Claims 2 and 15, Tolman in view of Talmor teaches the limitations above, yet fails to teach the sprayed liquid is collected and recirculated. GB '862 teaches a collecting means (r) for collecting and re-using water used in an ejector [P2, L108-116]. It would have been obvious to collect and re-circulate the sprayed liquid to increase the efficiency of the process.
- 41. Claims 3 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman in view of Talmor as applied to claim 1 above, and further in view of Morohashi et al. (USPN 6974279).
- Regarding Claim 3, Tolman in view of Talmor teaches the limitations above, yet fails to teach that the medium is sprayed with several nozzles. Morohashi et al. teaches an ejector

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(Figure 4) with several nozzles (15a, 22). It would have been obvious to use several nozzles to increase the suction effect of the ejector apparatus.

- 43. Regarding Claim 22, Tolman in view of Talmor teaches the limitations above, yet fails to teach a rotating movement in the separating means. Morohashi et al. teaches a cyclone separator (7), the operation of which is well known in the art to produce a rotational movement of the material inside. It would have been obvious achieve a rotating movement inside the separator to facilitate separate of the constituents.
- 44. Claims 4-11, 13, 18-20, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman in view of Talmor as applied to claim 1 above, and further in view of EPO Document (EP 1179682 A2, hereafter '682) and Morohashi et al..
- 45. Regarding Claims 4, 5, 6, 13, 18, 26, and 27 Tolman in view of Talmor teaches the limitations above, yet fails to teach a second medium. '682 teaches an ejector utilizing a second medium (Figure 2, Q3). '682 further teaches that the second medium is a liquid [Para. 9] medium and that the liquid may be water. Morohashi et al. teaches that air, a gaseous medium may be used instead [C8, L62-65]. It would have been obvious to utilize a second medium to clean the ejector and that the second medium could be a liquid or gas, depending on the application.
- 46. Regarding Claim 7, Tolman in view of Talmor teaches the limitations above, yet fails to teach the proportion of the second medium and the actuating medium is regulated. '682 teaches that the flow rate of Q3 can be set optimally depending on the configuration of the ejector and/or the flow rate of Q2 [Para. 15]. It would have obvious to regulate the proportion of the mediums as taught by '682.

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47. Regarding Claims 8-10, Tolman in view of Talmor teaches the limitations above, yet fails to teach the how the second medium is sprayed in relation to the ejector device. '682 teaches (Figures 2, 3, and 4) that the second medium can be injected at various locations as desired. It would have been obvious to specify the location of the second medium as required by the application.

- 48. Regarding Claim 11, Tolman in view of Talmor teaches the limitations above, and Tolman further teaches an air washing chamber (10) that separates the sprayed medium from the gas flow. Tolman in view of Talmor fails to teach the second medium, however, '682 teaches the second medium as described above. It would have been obvious to separate the second medium from the gas flow in a manner similar to the separation of the water and gas flow as taught by Tolman.
- 49. Regarding Claims 19 and 20, Tolman in view of Talmor teaches the limitations above, yet fails to teach a nozzle for bringing the second medium. '682 teaches a nozzle (10) for bringing the second medium. It would have been obvious to use a nozzle to introduce the second medium into the ejector. Further, the ejector produces a vacuum by which to draw fluid Q2 into the ejector. It would suffice to say that it would produce a vacuum in the nozzle (10) as well, which would draw the liquid Q3 into the ejector.
- 50. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tolman in view of Talmor as applied to claim 1 above, and further in view of Morohashi et al. and Japanese Document (JP 9301504, hereafter '504, abstract provided by applicant).
- 51. Regarding Claim 12, Tolman in view of Talmor teaches the limitations above, yet fails to teach odor elimination or suction effect intensification by the second medium. Morohashi et al.

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teaches, as described above, the intensification of the suction effect by the second medium. '504 teaches supplying a deodorizing agent (abstract). It would have been obvious to use the second medium to eliminate odors in refuse conveying.

### Double Patenting

52. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPO 644 (CCPA 1960).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

53. Claims 4-13 and 18-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 6-22 of copending Application No. 10591302. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter of the instant application is fully encompassed by the subject matter of copending Application No. 10591302.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William R. Harp whose telephone number is (571) 270-5386. The examiner can normally be reached on Monday - Thursday, 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/ Supervisory Patent Examiner, Art Unit 3651

/W. R. H./ Examiner, Art Unit 3651